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DATE MAILED:

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.	
09/133,119	08/12/98	LE		J	NYU	93-01M4AZ
LIM10/0610			一	EXAMINER		
' HM12/0619 ' HAMILTON BROOK SMITH & REYNOLDS				JOHNSON, N		
2 MILITIA DRIVE				ART UN	IIT	PAPER NUMBER
LEXINGTON MA	02173			1642		11

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

06/19/00



Application No. 09/133,119

Applicant(s)

Group Art Unit 1642

Office Action Summary Examiner Nancy Johnson

Responsive to communication(s) filed on <u>Mar 31, 2000</u>	
☐ This action is FINAL.	
Since this application is in condition for allowance except for formal matters, prosecution in accordance with the practice under Ex parte Quay/1935 C.D. 11; 453 O.G. 213.	as to the merits is closed
A shortened statutory period for response to this action is set to expire3 month(s), or longer, from the mailing date of this communication. Failure to respond within the period for respapplication to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under 37 CFR 1.136(a).	onse will cause the
Disposition of Claim	
	_ is/are pending in the applicat
Of the above, claim(s) is/a	re withdrawn from consideration
X Claim(s) 4, 6, 12, and 14	is/are allowed.
	is/are rejected.
☐ Claim(s)	
☐ Claims are subject to re-	
Application Papers  See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  The drawing(s) filed on	
Attachment(s)  Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152	

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1. Claims 1, 2, 3, 5, 7, 8 and 17 have been amended.
Claims 18-41 have been added.

Claims 1-41 are pending.

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. The rejection of claims 1-3, 5, 7-11, 13, 15-17 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is withdrawn.
- 4. The rejection of claims 2-3, 5, 10-11, 13, 17 under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement commensurate with the scope of the claims, is withdrawn.
- 5. The rejection of claims 1, 7 and 8 under 35 U.S.C. 102(b) as being anticipated either the 1994-1995 Promega Catalog or p.962 of Lehninger's Biochemistry Textbook is withdrawn.
- 6. The rejection of claims 9 and 15-16 under 35 U.S.C. 102(b) as being anticipated by pages 152-153 of the 1993-1994 New England Biolabs Catalog is withdrawn.
- 7. The rejection of claims 1, 7, 8, 9 and 15-16 under 35 U.S.C. 102(b) as being anticipated by either of Accession number M32046 (15 June 1990) or N90300 (1 Nov. 1989) is withdrawn.

## **NEW REJECTIONS**

8. The amendment filed 3/31/00 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the

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original disclosure is as follows: The amendment to page 34, line 25 of the specification, which inserts low, medium and high stringency condition is an incorporation by reference from the Sambrook and Ausubel references. The applicant states that "relevant portions of Ausubel et al and Sambrook et al are attached as Exhibits A and B." No such Exhibits A and B are found in the applicant's response filed 3/31/00. In the absence of this supporting material, the requested amendment is considered to be new matter.

9. Claims 1-3, 5, 7-11, 13, 15-41 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1-3, 7(c), 8(c), 9-11, 15-16, 18-25, 27© and 28© are broadly drawn to polynucleotides (and vectors and methods of manufacture comprising said polynucleotides) that hybridize under various stringency conditions to SEQ ID NO:2, SEQ ID NO:4, the polynucleotide that encodes SEQ ID NO:3 or the polynucleotide that encodes SEQ ID NO:5, wherein said polynucleotide, when expressed along with polynucleotide sequences expressing the appropriate  $V_H$  or  $V_L$  regions of the cA2 anti-hTNF $\alpha$  antibody and an IgG1 immunoglobulin constant region, encodes a polypeptide that binds to hTNF $\alpha$ .

Claims 5, 13, 17, 26, 29-41 are broadly drawn to polynucleotides (and vectors and methods of manufacture comprising said polynucleotides) that encode polypeptides **comprising** "fragments" SEQ ID NO:3 or SEQ ID NO:5 (amino acid sequences of  $V_L$  or  $V_H$  regions of the cA2 monoclonal antibody, an anti-hTNF $\alpha$  antibody), said polynucleotides when expressed and paired with the appropriate  $V_H$  or  $V_L$  region of the cA2 anti-hTNF $\alpha$  antibody and an IgG1 immunoglobulin constant region, bind to hTNF $\alpha$ . Thus, the claim are drawn to polynucleotides that comprise only fragments of the cited SEQ ID NO's.

The specification exemplifies a single species of the broadly claimed genus, the polynucleotide sequence SEQ ID NO:2, which encodes the  $V_L$  region of the cA2 monoclonal antibody that binds to hTNF $\alpha$ , and the polynucleotide sequence SEQ ID NO:4, which encodes the

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 $V_H$  region of the cA2 monoclonal antibody that binds to hTNF $\alpha$ . Because of the highly conserved structure of the immunoglobulin variable region polypeptides and the polynucleotides that encode these regions, and because antibody specificity is controlled by a limited number of amino acid residues scattered throughout the heavy and light variable regions of an immunoglobulin, one of skill in the art can not envision the actual sequences of other polynucleotide sequences based on the common attributes or features cited in the claims. Thus, there is inadequate evidence to lead one of skill in the art that the applicant was in possession of a representative sampling of the claimed genus.

- 10. Claims 4, 6, 12, 14 are allowed.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nancy Johnson whose telephone number is (703) 305-5860. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Caputa, can be reached on (703) 308-3995. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

NANCY A. JOHNSON, PH.D PRIMARY EXAMINER

Nancy A. Johnson, Ph.D.

Patent Examiner, Group 1642

June 15, 2000